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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,594	01/20/2004	Daishi Suzuki	42530-6400	1096
21611 7590 11/18/2009 SNELL & WILMER LLP (OC) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626				
EXAMINER				
SHAPIRO, JEFFERY A				
ART UNIT		PAPER NUMBER		
3653				
MAIL DATE		DELIVERY MODE		
11/18/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/760,594

**Applicant(s)**

SUZUKI, DAISHI

**Examiner**

JEFFREY A. SHAPIRO

**Art Unit**

3653

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 6 and 9-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1) and further in view of Parish et al (US 5,156,250).
3. Regarding Claims 1-3, 5, 6 and 9, Ma discloses a document verification system (30), as illustrated in figure 2, having a first transmitting sensor having a first emitter (34), a first radiation receiving section (44) on a second side, and a first reflecting sensor (40) having a second radiation reflection receiving section on the first side of the document passageway.

Further regarding Claims 1-3, 5, 6 and 9, Ma discloses a document verification system (170), as illustrated in figure 11, having emitters (172, 174) each facing respective radiation sensors (176, 178), thus forming emitter/sensor pairs, each pair located on an axis that is slanted with respect to the horizontal as represented by document (179). Note that each axis intersects in a "criss-cross" fashion, as illustrated in figure 11.

Further regarding Claims 1-3, 5, 6, 9 and 11, Ma additionally discloses a control circuit as illustrated in figure 3 that is driven by pulsed signal (100) as illustrated in figure

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4, which causes the synchronized activation of the LED emitters for the purpose of preventing interference between emitters and the various radiation receivers, i.e., sensors.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have added a second radiation receiver to an emitter/sensor pair, said second radiation receiver located on the same side as the emitter, for the purpose of capturing radiation reflected from the document and towards the first side.

One ordinarily skilled in the art would have recognized that from Ma's figure 2 that adding such a second sensor on the same side as the emitter of a pair as illustrated in figure 11 would capture such reflected radiation in that embodiment.

Further regarding Claims 1 and 9, Ma does not expressly disclose, but Parish discloses banknote passageway (150) sloping downwardly from the receiving opening for a distance and then downwardly for a distance to a flat passageway, as illustrated at figure 11. Note that a banknote entering Parish's passageway will flatten wrinkles in the banknote.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a jaggedly sloping passageway, as taught by Parish, in Ma's note processing apparatus for the purpose of diverting liquid from the pathway. Also note that ambient light is prevented from entering Parish's pathway.

Further regarding Claims 1 and 9, Ma does not expressly disclose, but Ashurst discloses a projection into the note path to prevent ambient light entering the validator, as discussed at Ashurst Claim 64.

Ashurst also discloses a starting sensor unit positioned adjacent the banknote receiving opening.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included a projection in Ma's notepath, as taught by Ashurst, for the purpose of preventing ambient light from entering the validator and ruining the validation sensor readings. In addition, it would have also been obvious to include a starting sensor, as taught by Ashurst, for the purpose of sensing the input of a bill and to therefore start the validator. Additionally, it would have been obvious to make such a sensor a light based sensor as this is one of several sensors known in the art for sensing an incoming sheet or bill and because all of the other sensors mentioned in Ashurst's machine are light based, which lowers maintenance costs by maintaining a single type of sensor, as is readily apparent to one of ordinary skill in the art.

Regarding Claim 10, Ma discloses each emitter emitting radiation of different frequencies at col. 14, lines 46-50.

Regarding Claim 12, Ma discloses a "comparator component" (168) which compares the sensed values with "threshold" values stored in memory. See col. 11, lines 40-57.

4. Claims 7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1) and

further in view of Chen (US 2002/0033968 A1) and still further in view of Parish et al (US 5,156,250).

Ma discloses the device described above.

5. Regarding Claims 7 and 13, Ma does not expressly disclose, but Chen discloses using a standard calibration paper to calibrate a light scanning device, such as disclosed by Ma, for the purpose of improving the quality of the scan in the areas of color, brightness and contrast. See Chen at abstract and paragraphs 8 and 9.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a standard calibration paper in Ma's bill scanning device for the purpose of calibrating the light emitters, i.e., light scanners and therefore increase the quality of the scan in the areas of color, brightness and contrast.

Further regarding Claims 1 and 9, Ma does not expressly disclose, but Parish discloses banknote passageway (150) sloping downwardly from the receiving opening for a distance and then downwardly for a distance to a flat passageway, as illustrated at figure 11. Note that a banknote entering Parish's passageway will flatten wrinkles in the banknote.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated a jaggedly sloping passageway, as taught by Parish, in Ma's note processing apparatus for the purpose of diverting liquid from the pathway. Also note that ambient light is prevented from entering Parish's pathway.

Regarding Claim 14, official notice is taken that it would have been obvious to incorporate an "initial setting button" for the purpose of calibrating the light sensors/scanners of Ma's light scanning device.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al (US 6,486,464 B1) in view of Ashurst et al (US 2004/0233618 A1) and further in view of Allot (DE 2921688 A).

Ma discloses the device described above.

7. Regarding Claim 8, Ma does not expressly disclose, but Allot discloses using document stabilizer comprising a transportation channel having three separate guide belts, as illustrated at figure 1, for the purpose of preventing creasing. See also Allot title and abstract provided in the Derwent English Translation.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a document stabilization mechanism in Ma's bill scanning device for the purpose of removing creases in the bills before they get to the light sensors and therefore increase the quality of the scan.

### ***Response to Arguments***

8. Applicant's arguments with respect to Claims 1-3, 5-7 and 9-14 have been considered but are moot in view of the new ground(s) of rejection.

The taking of official notice that the "initial setting button" recited in Claim 14 was common knowledge is taken to be admitted prior art since there was no traversal by Applicant in the current response, dated 9/29/09.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JEFFREY A. SHAPIRO** whose telephone number is (571)272-6943. The examiner can normally be reached on **Monday-Friday, 9:00 AM-5:00 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Shapiro/  
Examiner, Art Unit 3653

November 14, 2009